

Practical Program Evaluation—*Using CDC's Evaluation Framework*

By:

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Disclaimer...

The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention.

Objectives: Be able to...

- State how evaluation, planning, and performance measurement are related
- State CDC Evaluation Framework steps and standards
- Construct simple logic models including activities/outputs, outcomes/impacts
- Use logic models to:
 - engage stakeholders
 - set a good evaluation focus

Defining Evaluation

- **Evaluation** is the systematic investigation of the merit, worth, or significance of any “*object*”

Michael Scriven

- **Program** is any organized public health action/activity implemented to achieve some result

Integrating Processes to Achieve Continuous Quality Improvement

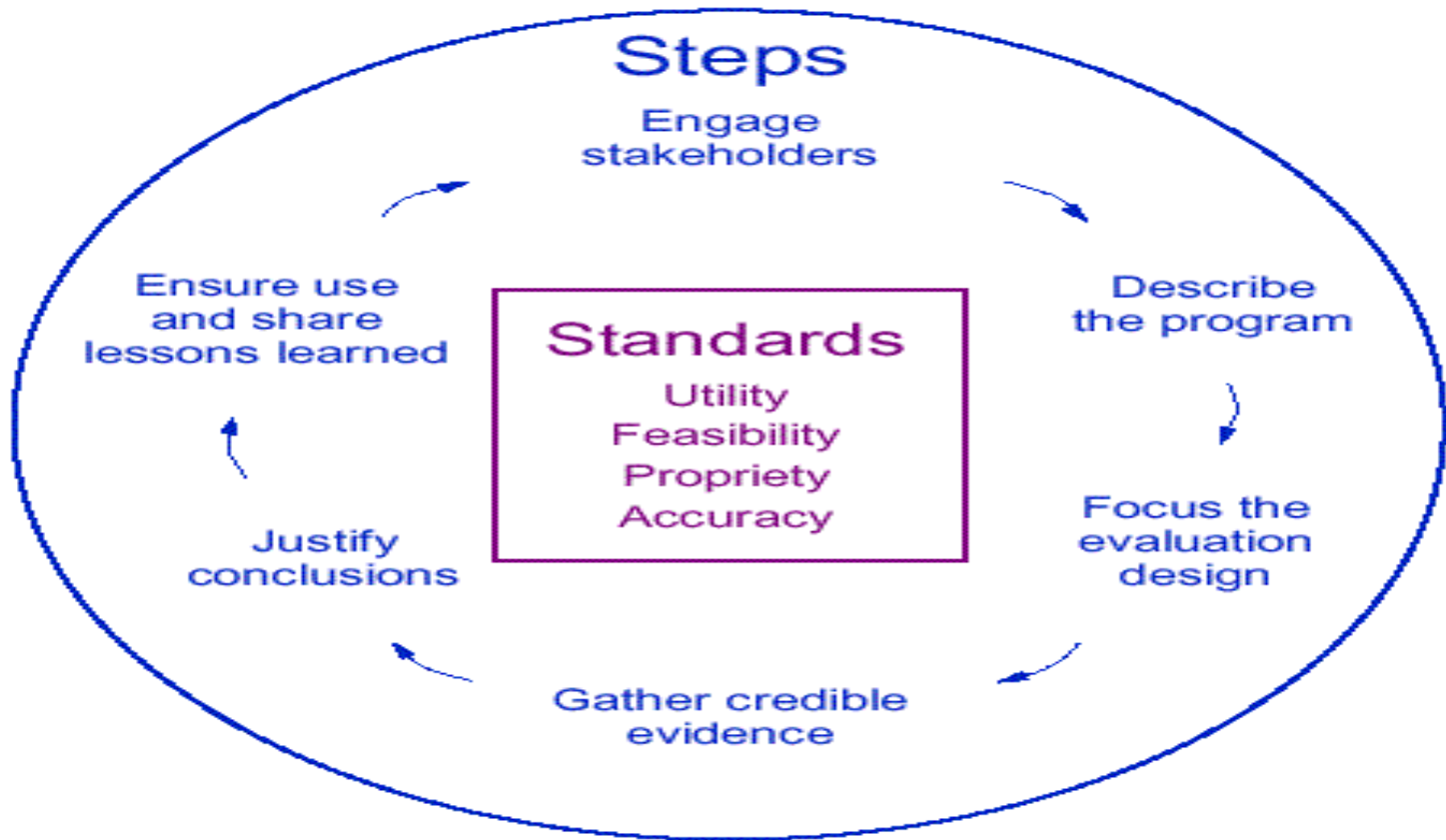
■ Continuous Quality Improvement (CQI) cycle.

- **Planning**—*What* actions will best reach our goals and objectives.
- **Performance measurement**— How are we doing?
- **Evaluation**—*Why* are we doing well or poorly?



Framework for Program Evaluation

FIGURE 1. Recommended framework for program evaluation



Underlying Logic of Steps

- **No eval is good unless**... results are **used** to make a difference
- **No results are used unless**... a **market** has been created prior to creating the product
- **No market is created unless**.... the eval is **well-focused**, including most relevant and useful questions
- ***And...***

Establishing the Best Focus Means...

- **Framework Step 1:** Identifying who cares about our program besides us? Do they define program and “success” as we do?”
- **Framework Step 2:** What are milestones and markers on the roadmap to my main PH outcomes?

The Four Standards

No one “right” evaluation. Instead, best choice at each step is options that maximize:

- **Utility**: Who needs the info from this evaluation and what info do they need?
- **Feasibility**: How much money, time, and effort can we put into this?
- **Propriety**: Who needs to be involved in the evaluation to be ethical?
- **Accuracy**: What design will lead to accurate information?



Practical Program Evaluation

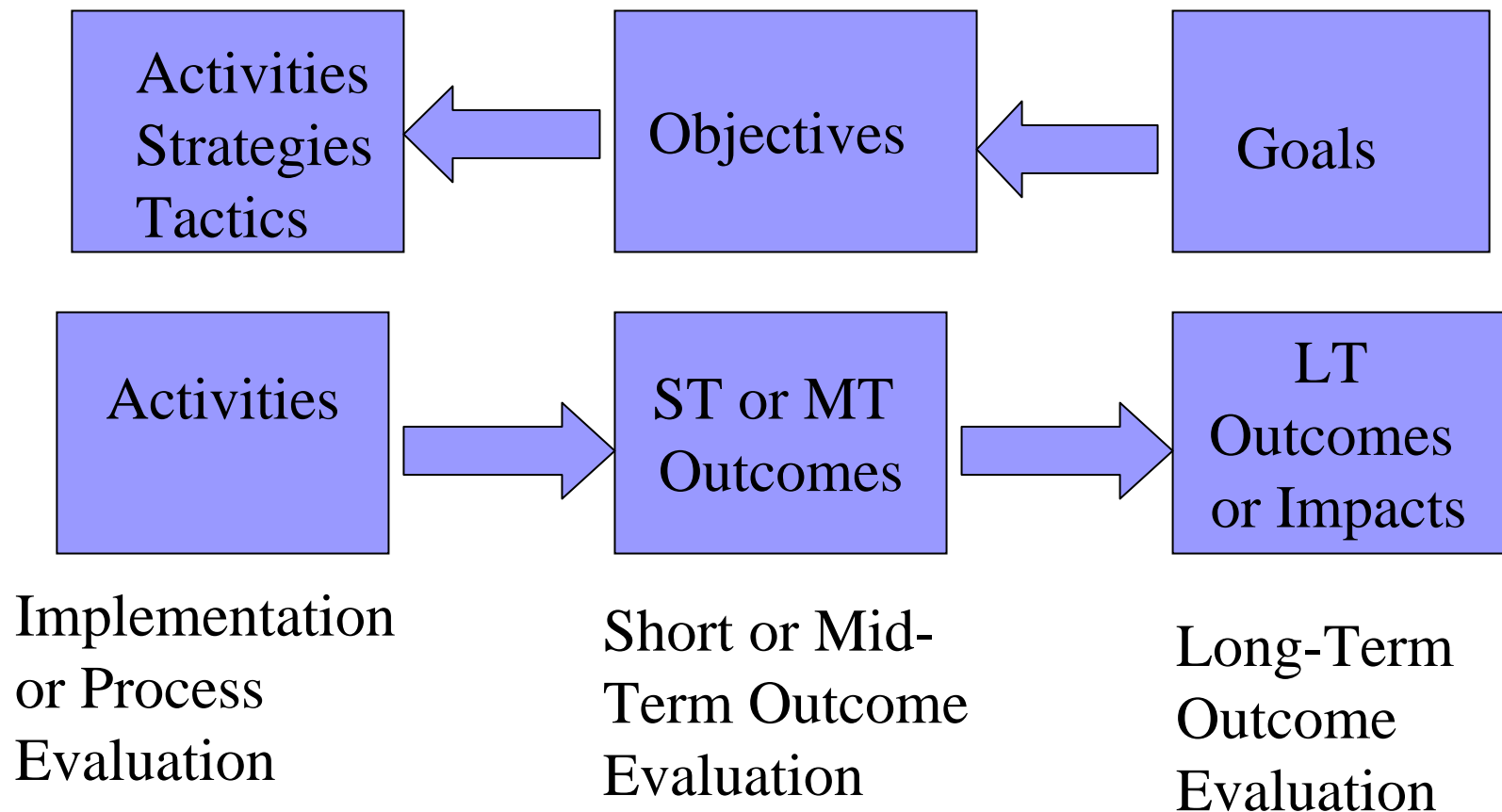
Constructing Simple Logic
Models

You Don't **Ever** Need a Logic Model, BUT, You **Always** Need a Program Description

Don't jump into planning or eval without clarity on:

- The big **“need”** your program is to address
- The key **target group(s)** who need to take action
- The kinds of actions they need to take (your intended **outcomes** or objectives)
- **Activities** needed to meet those outcomes
- “Causal” **relationships** between activities and outcomes

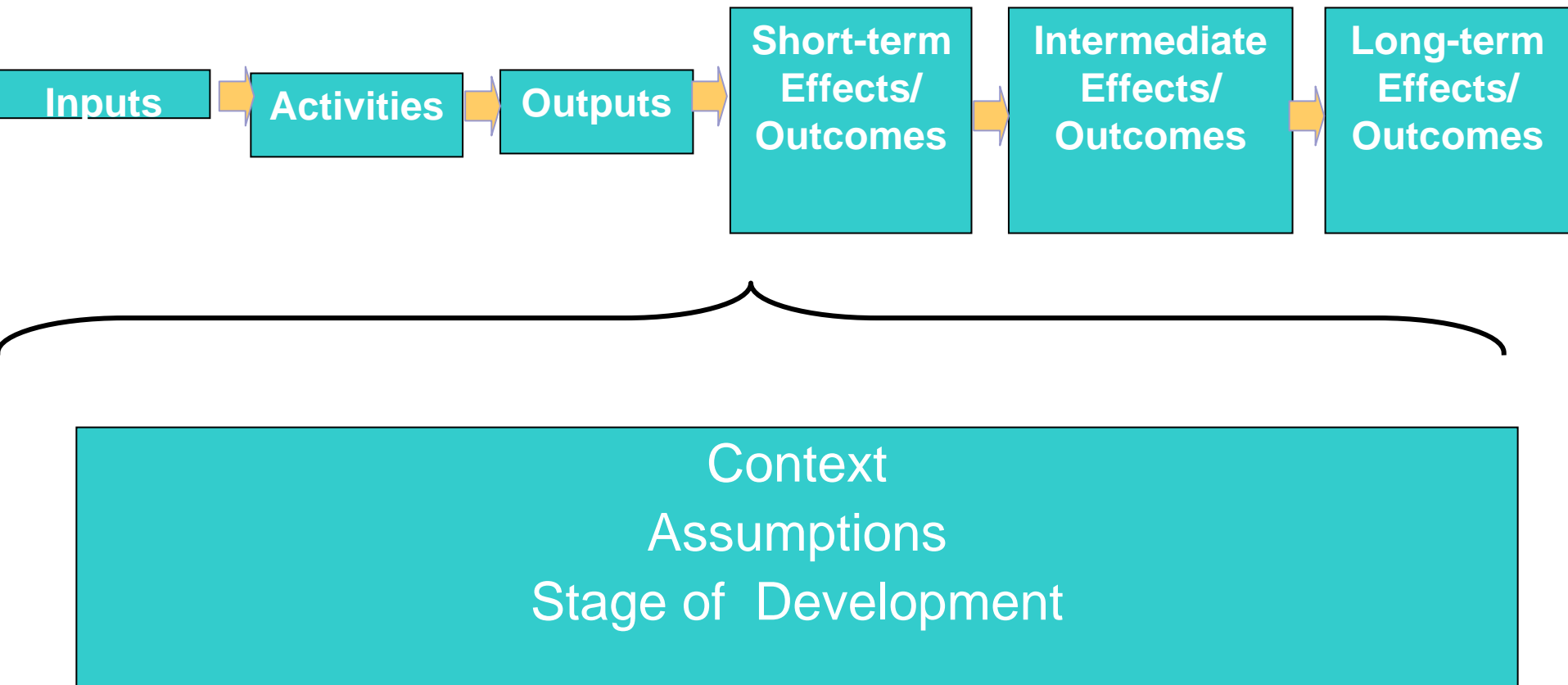
Linking Planning and Evaluation




Logic Models and Program Description

- ***Logic Models : Graphic depictions of the relationship between your program's activities and its intended effects***

Step 2: Describing the Program: Complete Logic Model





Logic Model Terminology: At the core of the model are...

- **Activities:** *What the program and its staff actually do*
- **Effects/Outcomes:** *The changes that result in someone or something **other than the program and its staff.***



Practical Program Evaluation

Logic Model Case Illustration

Activities and Effects: Prov Ed

■ Activities

- Outreach to providers
- Develop newsletters
- Distribute newsletter
- Immunization trainings
- Distribute Tool Kits
- Nurse educator presentations to LHD nurse staff
- Physician peer educator presentations at conferences and rounds

■ Effects/Outcomes

- Providers:
 - read newsletters
 - attend trainings/rounds
 - receive/use tool kits
- Provider KAB increases
- Providers know latest developments and policies
- Providers know registry/role
- Provider motivation to immunize increases
- LHD nurses do private consults with providers
- Providers do more immunizations

- *Coverage among target pops increases*
- *VPD in target pops reduced*

Early Activities	Later Activities	Early Outcomes	Later Outcomes
Do outreach to providers	Distribute newsletter	Provs read newsletters	KAB increases
Develop newsletter	Conduct immuno trainings	Provs attend trainings and rounds	Know policies
Develop Tool Kit	Nurse educator LHD presentations	Provs receive and use tool kits	Know registry
	Physician peer ed rounds	LHD nurses do private prov consults	Motivation increases
			Do more immuno
			Coverage increases
			VPD reduced

For Planning and Evaluation

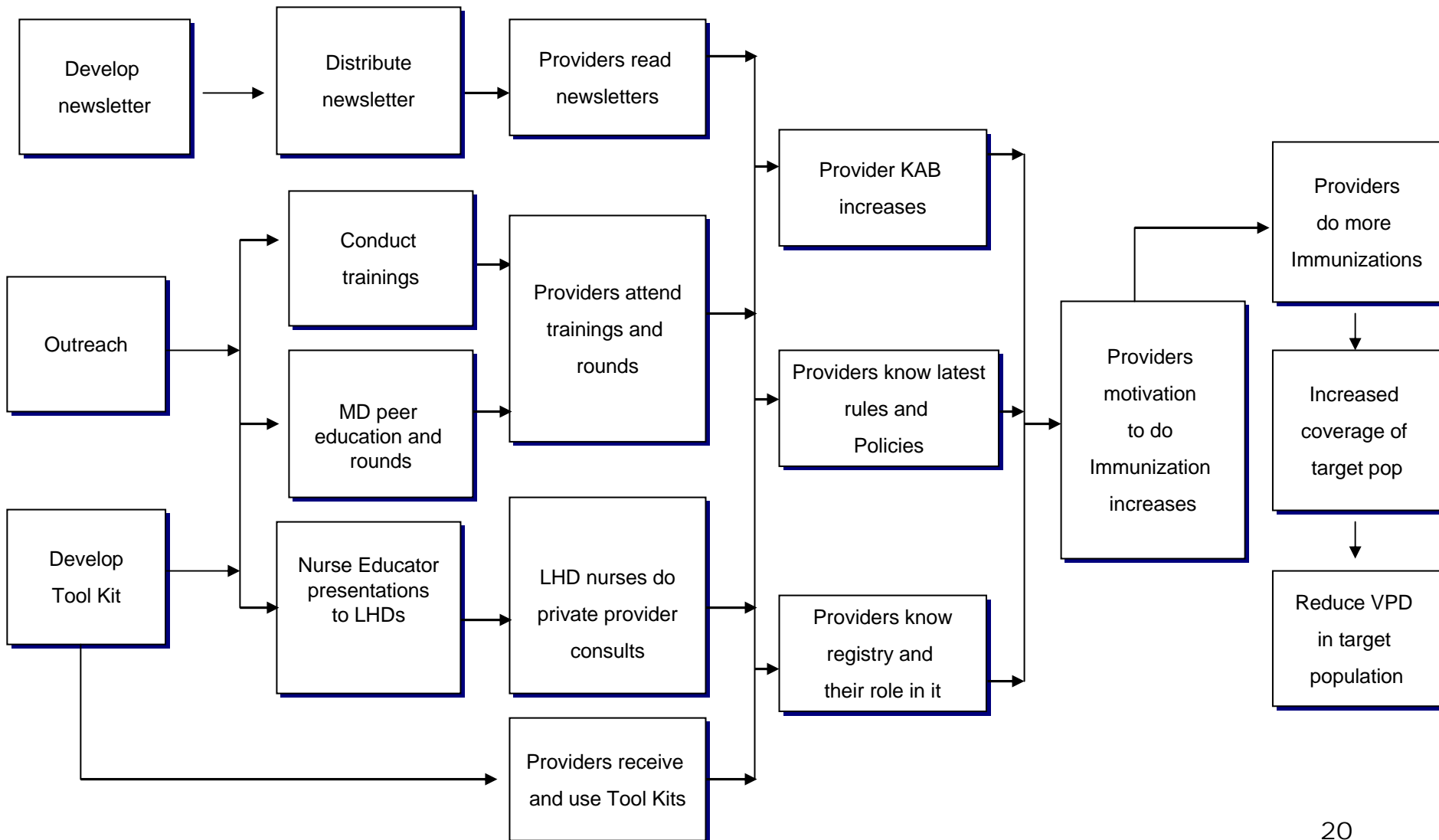
“Causal” Arrows Can Help

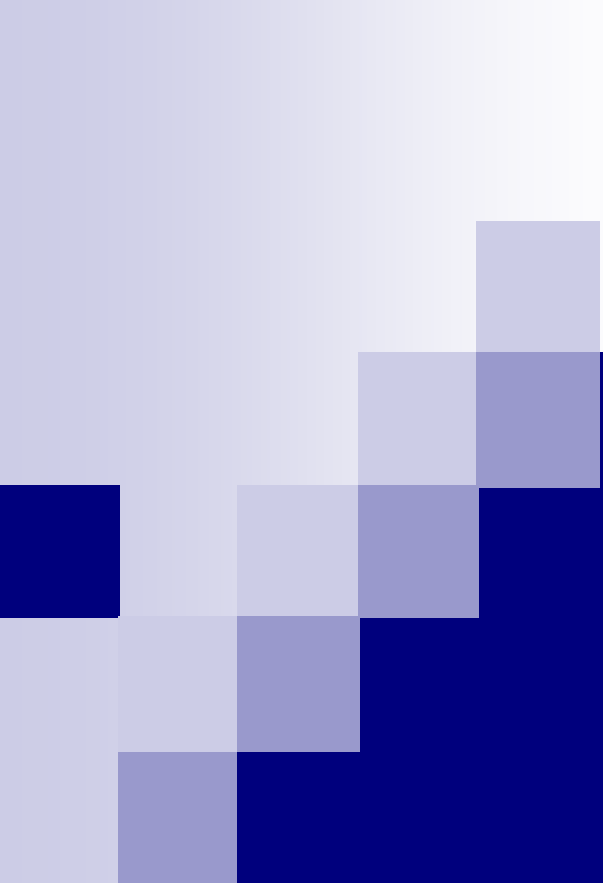
- **Not** a different logic model, but same elements in different format
- Arrows can go from:
 - ***Activities to other activities: Which*** activities feed ***which*** other activities?
 - ***Activities to outcomes: Which*** activities produce ***which*** intended outcomes?
 - ***Early effects/outcomes to later ones: Which*** early outcomes produce ***which*** later outcomes

Provider Education: "Causal" Roadmap

Activities

Outcomes





Applying Teaching Points to Peri-natal Case Example

Perinatal HIV Program—Raw Material for Logic Model Table

<u>Inputs</u>	<u>Activities</u>	<u>Outputs</u>	<u>Outcomes</u>
Budget	Collaborate with healthcare providers; work with orgs and institutions providing pre-natal and post-natal care to targeted women	Number and duration of messages by medium	Maximal reduction in perinatal transmission of HIV
Staff			Targeted women receive prevention counseling, pre- and post-natal
Legal authority	Collect standardized data/participate in evaluation	# clients reached	
Science/best prax base		# sessions	Pregnant women are tested for HIV
Existing surveillance and other data/systems	Do social marketing to targeted women and their partners	# providers trained	
	Do community outreach to targeted women and their partners		Targeted women receive therapy, pre- and post-natal
<u>From CDC:</u>		# HIV+ women being case managed	Reduction in the number of HIV-infected women delivering
Funds	Do provider training for providers of prenatal care, labor and delivery, and other relevant health professionals	# HIV- women being case managed	
Consult and TA		# hospitals offering rapid testing	HIV-infected women receive pre-natal care
National eval efforts	Do case management for HIV-infected pregnant women and their infants	# eligible women	
Disseminate lessons learned		# women receiving rapid testing	Reduction in the number of HIV-infected infants
	Implement rapid testing process with targeted women and in targeted facilities		

Perinatal HIV Program—High-Level Logic Model Table

<u>Inputs</u>	<u>Activities</u>	<u>Outcomes</u>
<u>If we have these resources and this larger context</u>	<u>We can mount these activities</u>	<u>And then this will happen</u>
Budget		
Staff	Collaborate with healthcare providers; work with orgs and institutions providing pre-natal and post-natal care to targeted women	Targeted women receive prevention counseling, pre- and post-natal
Legal authority		
Science/best prax base		
Existing surveillance and other data/systems	Collect standardized data/participate in evaluation	Pregnant women are tested for HIV
	Do social marketing to targeted women and their partners	Reduction in the number of HIV-infected women delivering
	Do community outreach to targeted women and their partners	
	Do provider training for providers of prenatal care, labor and delivery, and other relevant health professionals	Reduction in the number of HIV-infected infants
	Do case management for HIV-infected pregnant women and their infants	Targeted women receive therapy, pre- and post-natal
<u>From CDC:</u>		
Funds		
Consult and TA		
National eval efforts	Implement rapid testing process with targeted women and in targeted facilities	HIV-infected women receive pre-natal care
Disseminate lessons learned		

Perinatal HIV Program— Program “Roadmap”

Inputs

If we have these
resources and this
larger context

Budget

Staff

Legal authority

Science/best prax
base

Existing surveillance
and other
data/systems

From CDC:

Funds

Consult and TA

National eval efforts

Disseminate lessons
learned

Activities

We can mount these
activities

Collaborate with healthcare
providers; work with orgs
and institutions providing
pre-natal and post-natal care
to targeted women

Collect standardized
data/participate in evaluation

And then these

Do social marketing to
targeted women and
their partners

Do community outreach
to targeted women and
their partners

Do provider training for
providers of prenatal
care, labor and delivery,
and other relevant health
professionals

Do case management for
HIV-infected pregnant
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Implement rapid testing
process with targeted
women and in targeted
facilities

And then this will
happen

Targeted women receive
prevention counseling,
pre- and post-natal

Pregnant women are
tested for HIV

Targeted women receive
therapy, pre- and post-
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HIV-infected women
receive pre-natal care

And then this

Reduction in the number
of HIV-infected women
delivering

Reduction in the number
of HIV-infected infants



Note!

Logic Models make the
program theory **clear**, not
true!



Logic Models Take Time...So Be Sure to Use Them

- Not worth it as “ends in themselves”
- But can pay off big in:
 - Evaluation
 - Planning
 - Performance measurement

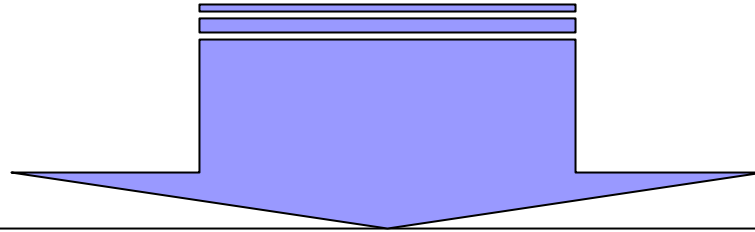
Which S'holders Matter Most?

Who is:

Affected by the program?

Involved in program operations?

Intended users of evaluation findings?



Of these, who do we most need to:

Enhance credibility?

Implement program changes?

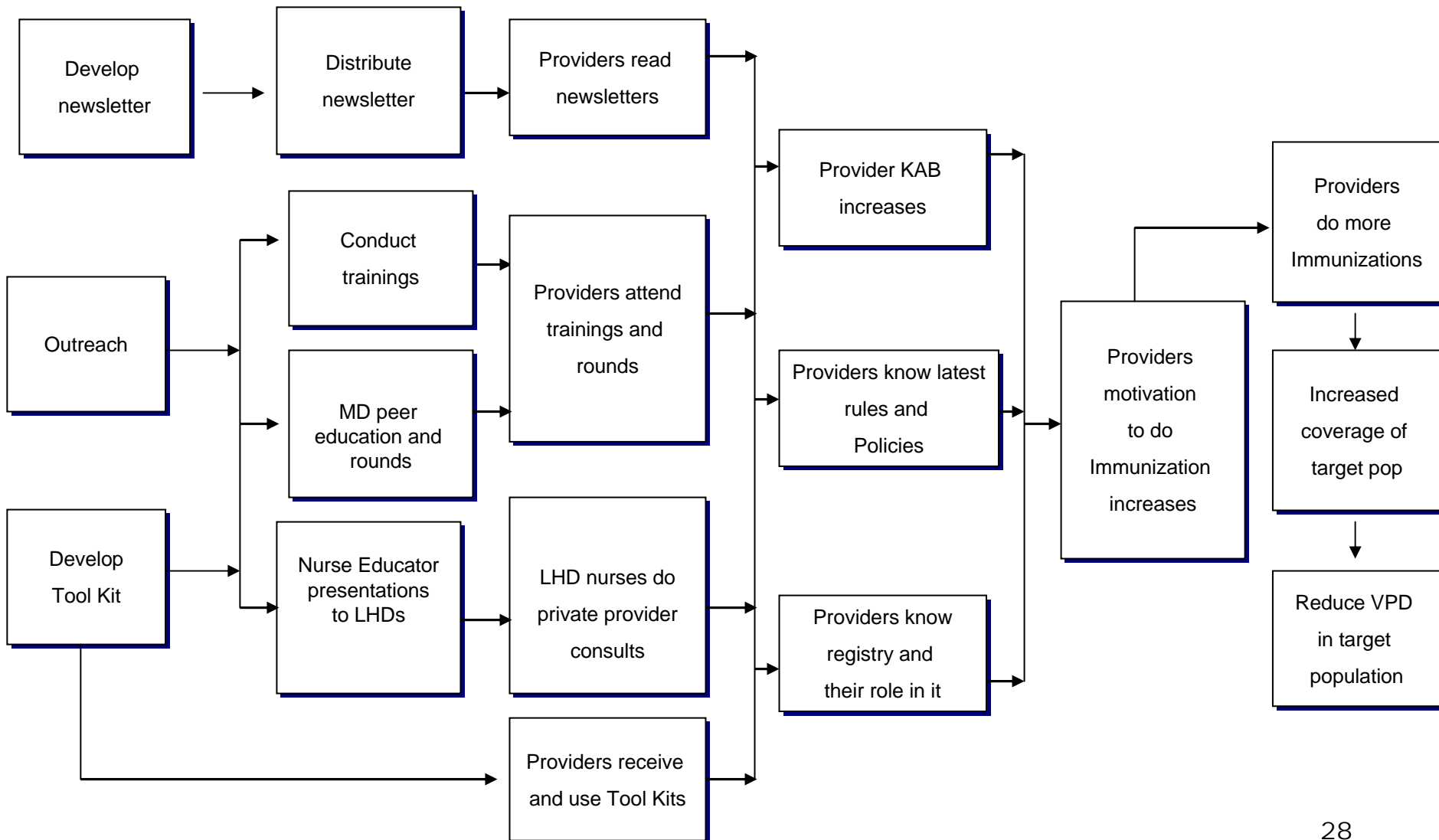
Advocate for changes?

Fund, authorize, expand program?

Provider Education: "Causal" Roadmap

Activities

Outcomes

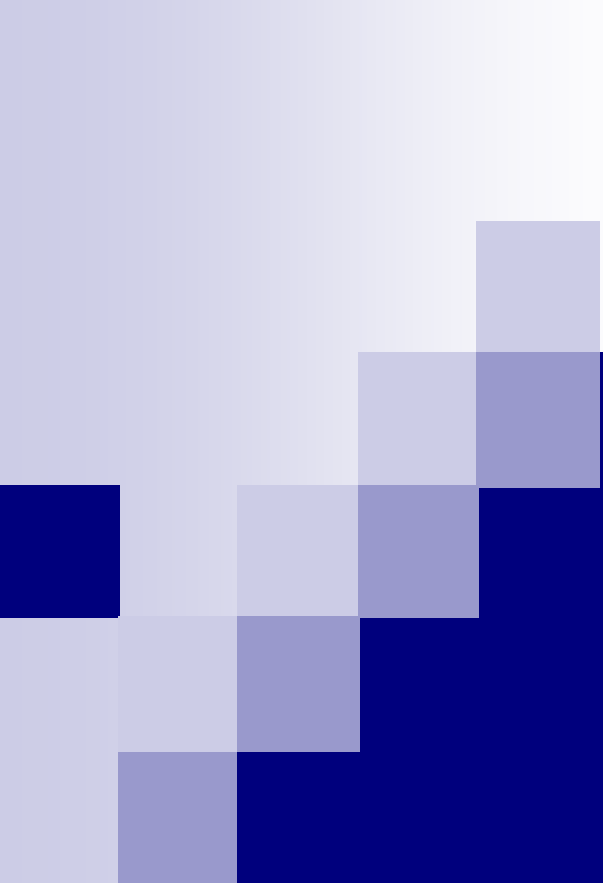




Using the Logic Model with Stakeholders

Do they agree/disagree with:

- The activities and outcomes depicted?
- The “roadmap”?
- Which outcomes = program “success”?
- How *much* progress on outcomes = program “success”?
- Choices of data collection/analysis methods?



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Science/best prax base		Do case management for HIV-infected pregnant women and their infants	Targeted women receive therapy, pre- and post-natal	
Existing surveillance and other data/systems	Collect standardized data/participate in evaluation	Implement rapid testing process with targeted women and in targeted facilities	HIV-infected women receive pre-natal care	
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National eval efforts				
Disseminate lessons learned				

Perinatal HIV Program— Program “Roadmap”

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Reduction in the number
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Reduction in the number
of HIV-infected infants

Eval Plan vs. Eval Focus

- Eval **Plan**: How I intend to measure **all** aspects of my program---all the boxes (and arrows) in my logic model?
- Eval **Focus**: The part of my program that needs to be measured in **this evaluation, this time?**
- Over life of the program:
 - Eval plan may never change
 - Eval focus is always changing

Step 3. Key Domains in Eval Focus

■ Implementation (Process)

- ☐ Is program in place as intended?

■ Effectiveness (Outcome)

- ☐ Is program achieving its intended short-, mid, and/or long-term effects/outcomes?

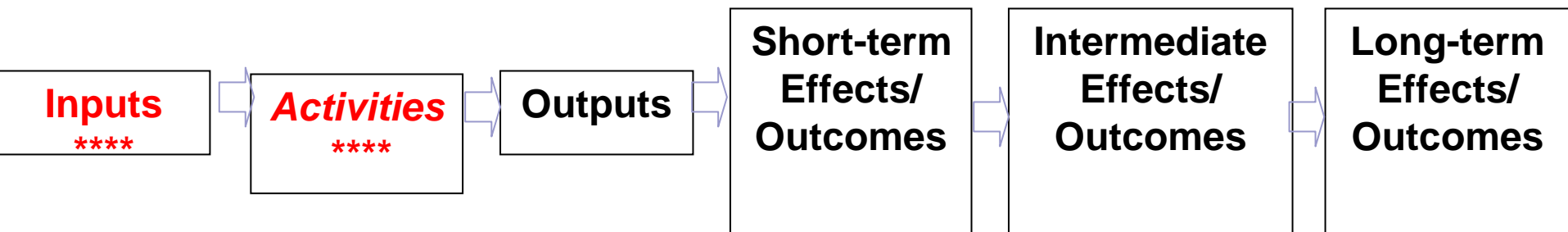
■ Efficiency

- ☐ How much “product” is produced for given level of inputs/resources?

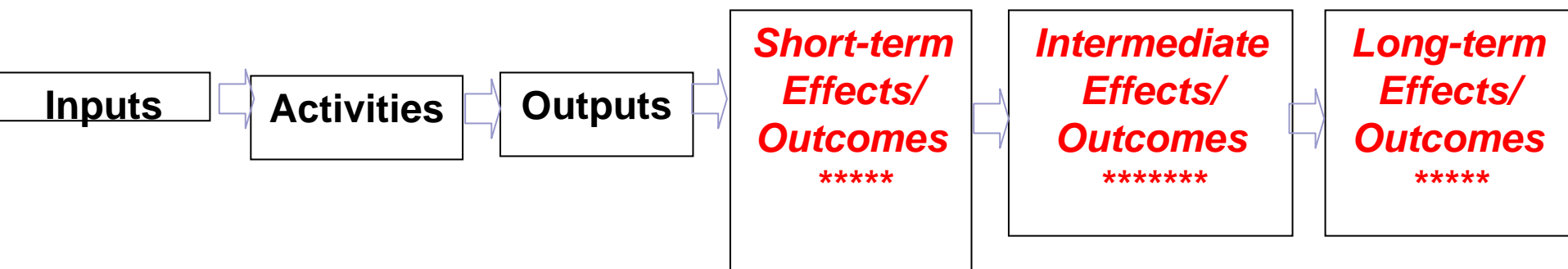
■ Causal Attribution

- ☐ Is progress on outcomes due to your program?

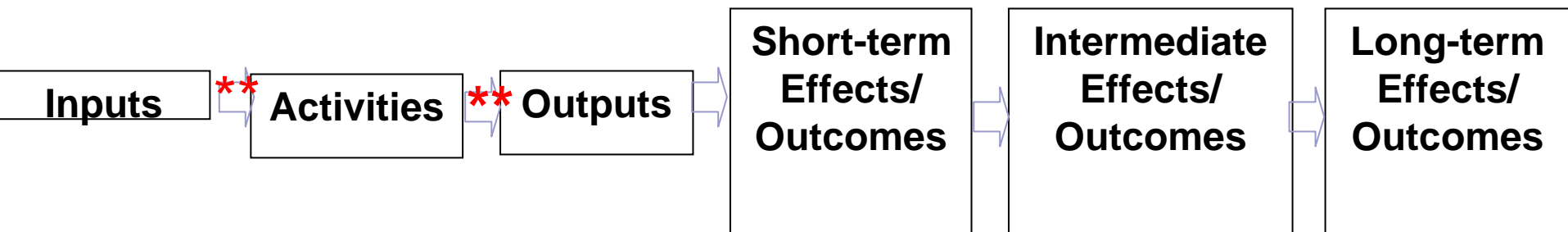
Evaluation Domains: Implementation



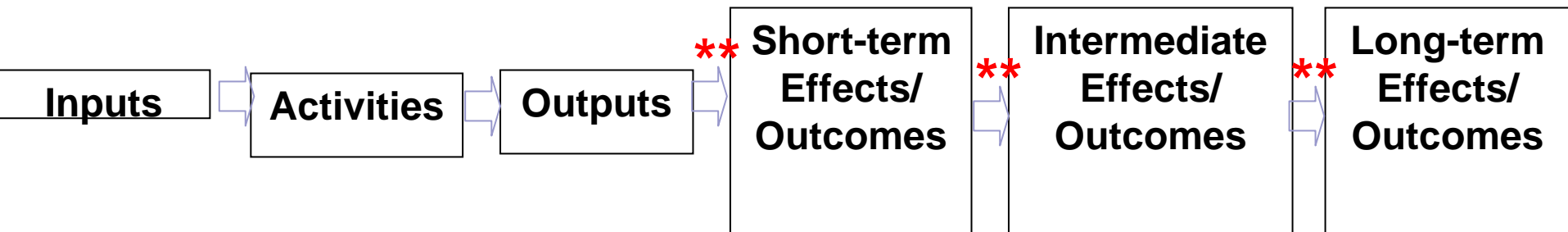
Evaluation Domains: Effectiveness



Evaluation Domains: Efficiency



Evaluation Domains: Causal Attribution



Setting Focus: Some Rules

Based on “utility” standard:

- **Purpose:** Toward what end is the evaluation being conducted?
- **User:** Who wants the info and what are they interested in?
- **Use:** How will they use the info?



Potential Purposes

- Accountability
- Program implementation
- “Continuous” program improvement
- Increasing the knowledge base
- Other...
- Other...



Deciding on the “Right” Focus: “Harvesting” Step 1...

Needs of Key S’holders from Step 1:

- What are key s’holders most interested in?
- Must I include this in my evaluation focus?

“Reality Checking” the Focus

Based on “feasibility” standard:

- **Stage of Development:** How long has the program been in existence?
- **Program Intensity:** How intense is the program? How much impact is reasonable to expect?
- **Resources:** How much time, money, expertise are available?

Some Evaluation Scenarios

- **Scenario I:** At Year 1, other communities want to adopt your model but want to know “what are they in for”

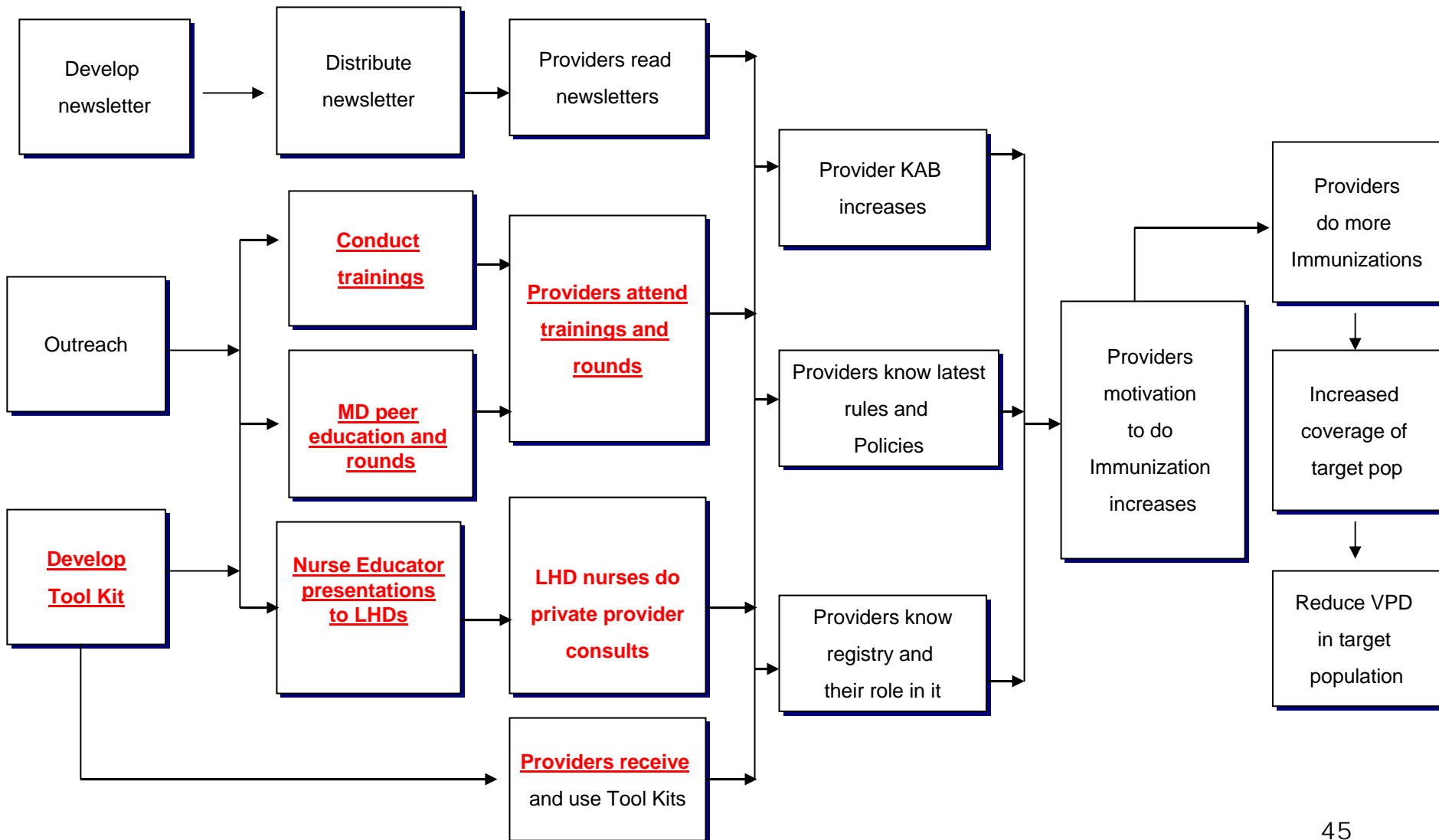
Scenario 1:

- **Purpose:** Examine program implementation
- **User:** The “other community”
- **Use:** To make a determination, based on your experience, whether they want to adopt this project or not

Provider Education: "Causal" Roadmap

Activities

Outcomes



Some Evaluation Scenarios

- **Scenario II:** At Year 3, you are seeking funding from a large foundation with a community improvement focus so that you can extend the program to a second community.

Scenario 2:

Purpose: Determine program progress

■ **User:** Your org and/or the foundation

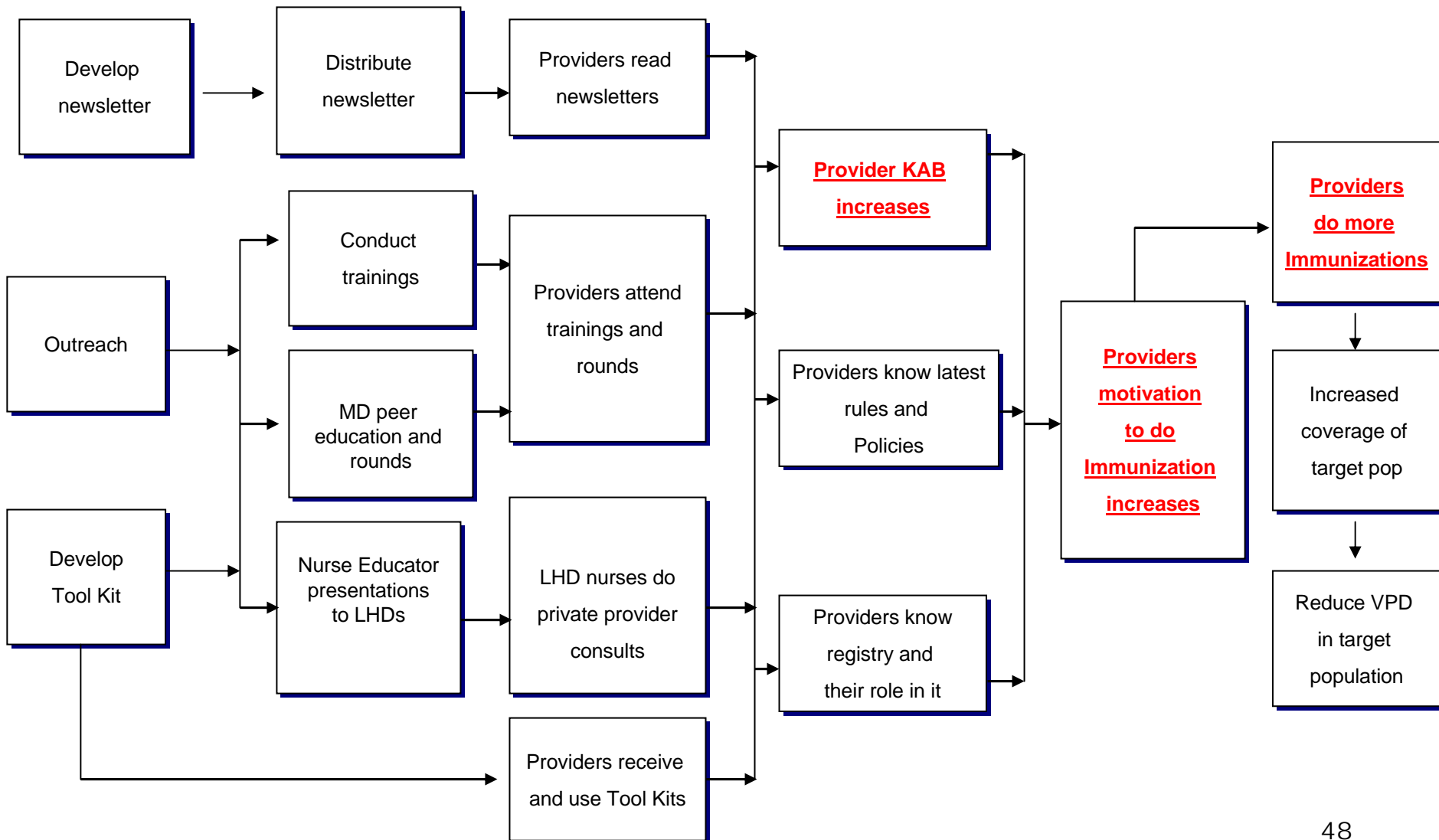
■ **Use:**

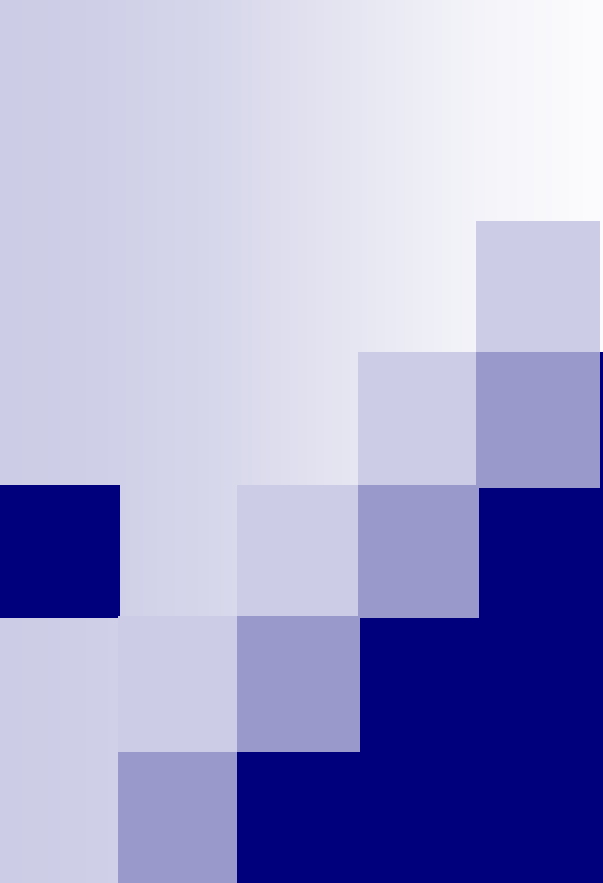
- ☐ You want to muster evidence to prove to the foundation you are effective enough to warrant their funding, or
- ☐ Foundation wants you to show evidence that proves sufficient effectiveness to warrant their funding

Provider Education: "Causal" Roadmap

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Perinatal HIV Program— Program “Roadmap”

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Practical Program Evaluation

Putting Your Logic Model to
Use in Performance
Measurement


Performance *Measurement* is...

- The specific (descriptive or numerical) representation of capacities, processes, or outcomes deemed relevant to the assessment of performance, ***and...***
- Comparison of performance against standards so as to...
- report progress and/or to identify areas for program improvement

Source: Public Health Foundation: *From Silos to Systems: Using Performance Management to Improve the Public's Health*; Turning Point Performance Management Collaborative; 2003

Performance *Measurement* is a Type of Evaluation...

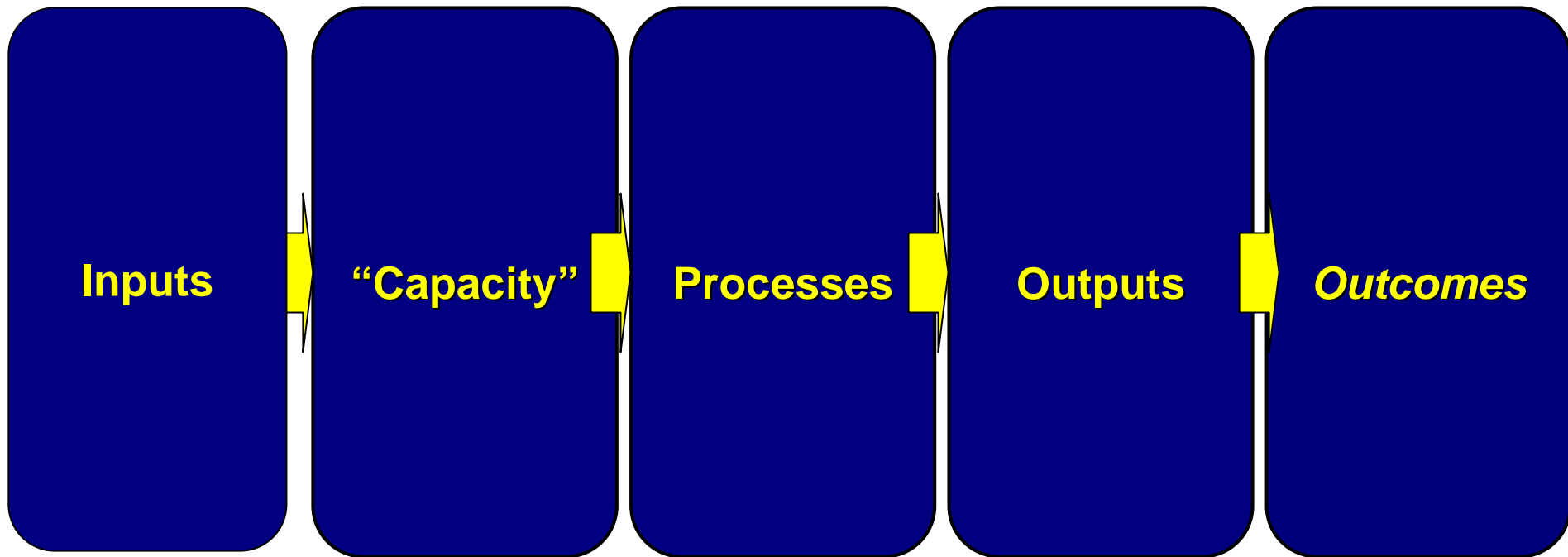
- It's a potential answer to the question—what should our evaluation focus be?
 - Purpose—to examine in summary way the overall performance of the program, and identify areas doing well or poorly
 - User—depends...
 - Use—depends...



Two Global “Purposes” for Performance Measurement

- Push—external mandates
- Pull—internal felt need
- Which purpose is in play will also influence the “use” and “user” of the performance measurement findings.

Focus for Performance Measurement May Target Any or All of These...



Source: Behn, Robert D.; Performance Leadership: 11 Practices That Can Ratchet Up Performance May 2004; Lichiello, P; op cit.



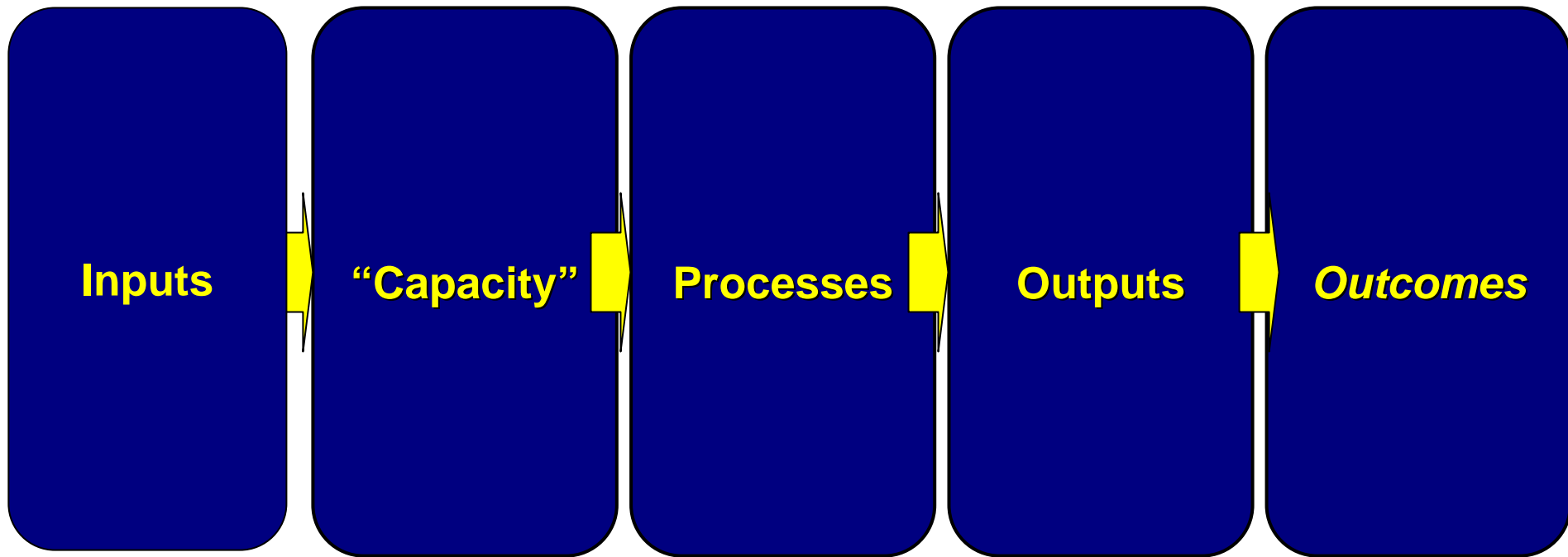
In “Push” Evaluation, Focus in Logic Model Made for You....

- Accountability and reporting
- Showing adherence/progress
 - You must produce these outcomes
 - You must focus on these activities
- Value of logic model---organized and informed “push back”

In “Pull” Evaluation....Internal Felt Need

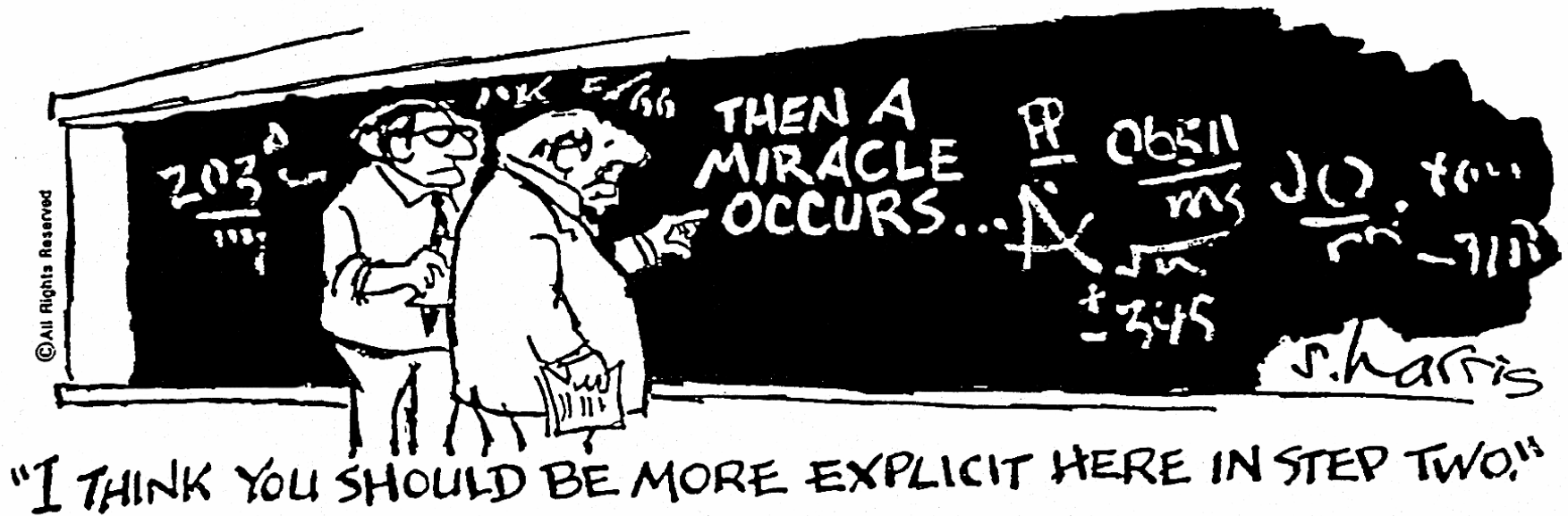
- Feed program improvement as well as accountability
- How am I doing? Where am I doing well and poorly?
- Hence, multi-domains or comprehensive coverage of measures
 - performance measurement “system”
 - “dashboard metrics”

Focus for Performance Measurement May Target Any or All of These...



Source: Behn, Robert D.; Performance Leadership: 11 Practices That Can Ratchet Up Performance May 2004; Lichiello, P; op cit.

Forgetting Intermediate Outcomes



Just as in Evaluation, Utility Sets Initial Focus

■ Push:

- ☐ Monitoring and reporting
- ☐ Contract management

■ Pull:

- ☐ Strategic planning
- ☐ Budgeting and financial management
- ☐ Program management
- ☐ Process improvement

Source: Poister, T.; Measuring Performance in Public and Nonprofit Organizations (The Jossey-Bass Nonprofit and Public Management Series) May 2003



Just as in Evaluation, Feasibility is Reality Check

- How established is your initiative or program?
- How intense is your program?
- How much and how complicated is the information that you need?
- What resources do you have for performance assessment?

Adapted from: Oregon State University Family Policy Program (Clara C. Pratt, et al.). "Figure 2-4" in *Building Results III: Measuring Outcomes for Oregon's Children, Youth, and Families*. (Salem, OR: Oregon Commission on Children and Families, 1998).

Criteria for Useful Set of Performance Measures

- Balanced and comprehensive
- Timely and actionable
- ***“Responsive”***
- ***“Relevant”***
- Resistant to goal displacement
- Non-redundant

Source: Poister, T.; *Measuring Performance in Public and Nonprofit Organizations* (The Jossey-Bass Nonprofit and Public Management Series) May 2003

Lichiello, P. *Turning Point Guidebook to Performance Measurement*; National Governors' Association (C. E. Trott and J. Baj). *Building State Systems Based on Performance: The Workforce Development Experience* (Annapolis Junction, MD: NGA Publications, 1996) and National Research Council. *Health Performance Measurement in the Public Sector: Principles and Policies for Implementing an Information Network* (Washington D.C.: National Academy Press, 1999).



Choosing the *Right* Outcomes— The “Goldilocks” Solution

- Not too distal; not too proximal; but “just right”
- Key trade-off is “relevance” versus “responsiveness”
- Think about “staked claim” as starting point

From Outcomes to “Dashboard”

- Logic model essential as roadmap
- But what route through the roadmap?
- Some ways to decide
 - Evidence base
 - System dynamic model
 - “***Critical path***”

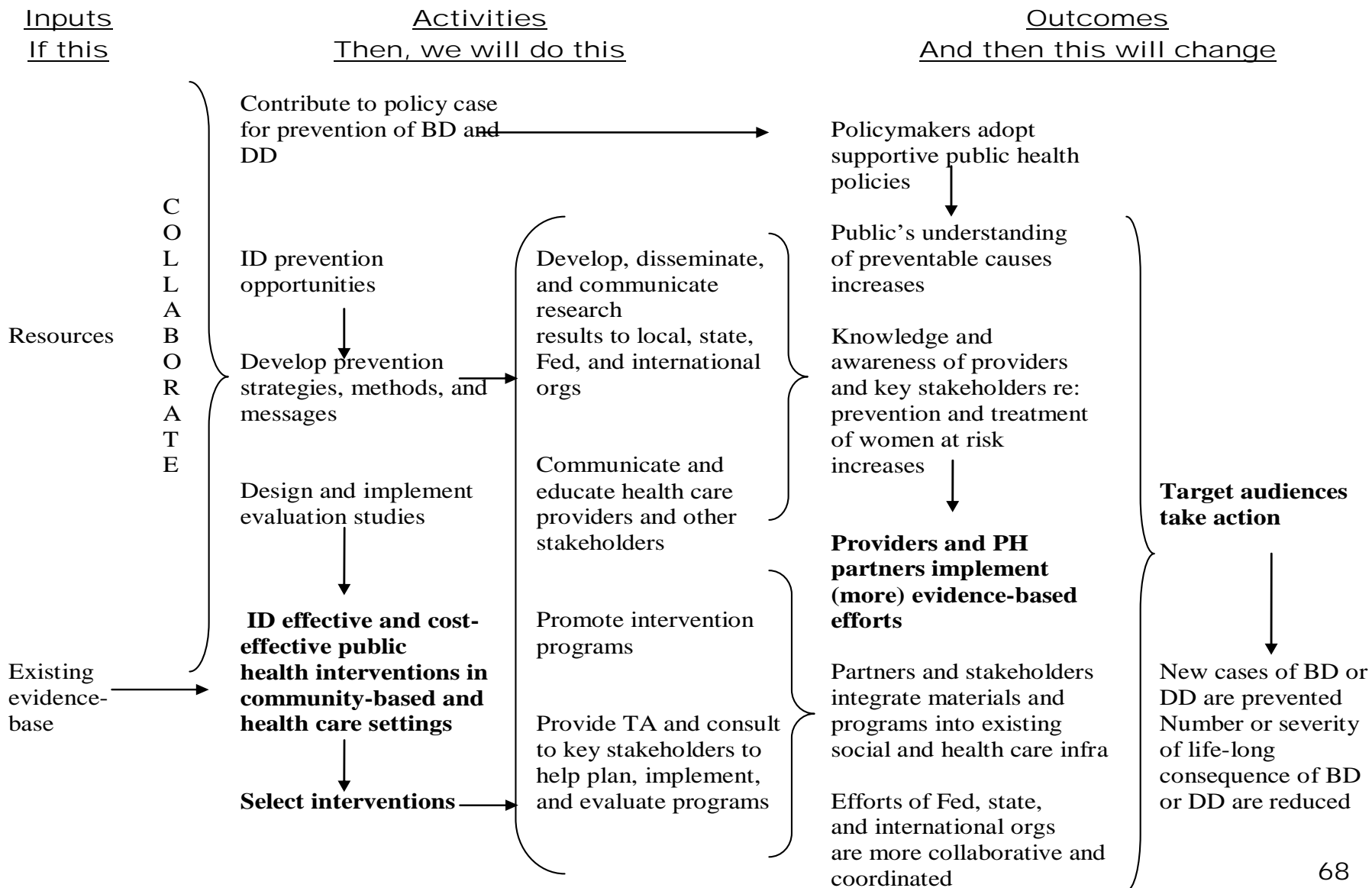
Critical Path

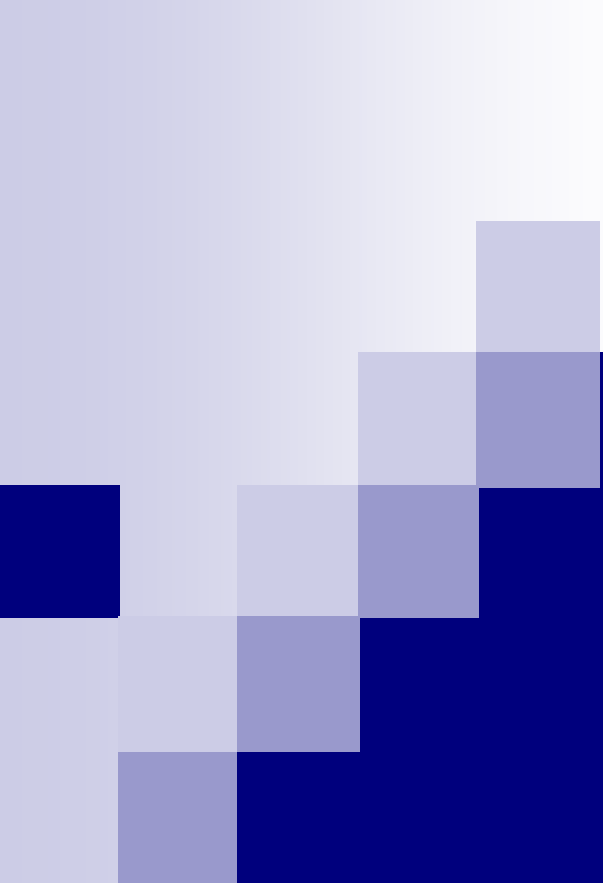
- If we can't do everything...What path(s) would we choose?
- Some criteria for choice:
 - ☐ Most leveraging?
 - ☐ Most cost-effective?
 - ☐ Reinforce our “brand” or distinctive competence
 - ☐ Mandated approach, i.e., Balanced Score Card?
 - ☐ Other...

Exercise—Choosing Path Through Roadmap

- Create a “dashboard” for continuous program improvement
 - ☐ Which outcomes and why?
 - ☐ Which activities/outputs and why?
 - ☐ Anything else and why?

Prevention Branch Dashboard





Applying Teaching Points to Peri-natal Case Example




In Short...

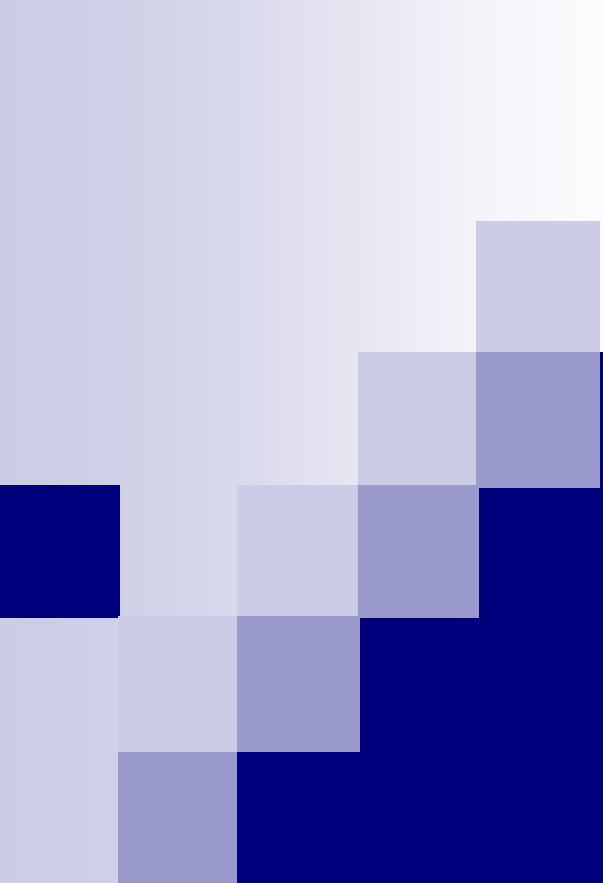


Upfront Small Investment...

- Clarified relationship of activities and outcomes
- Ensured clarity and consensus with stakeholders
- Helped define the right focus for my evaluation
- Clarified vision, mission, goals, objectives, and their interconnection
- Helped me clarify my “critical path”
- Help me cut to the “heart” of my program and...
- How best to get there



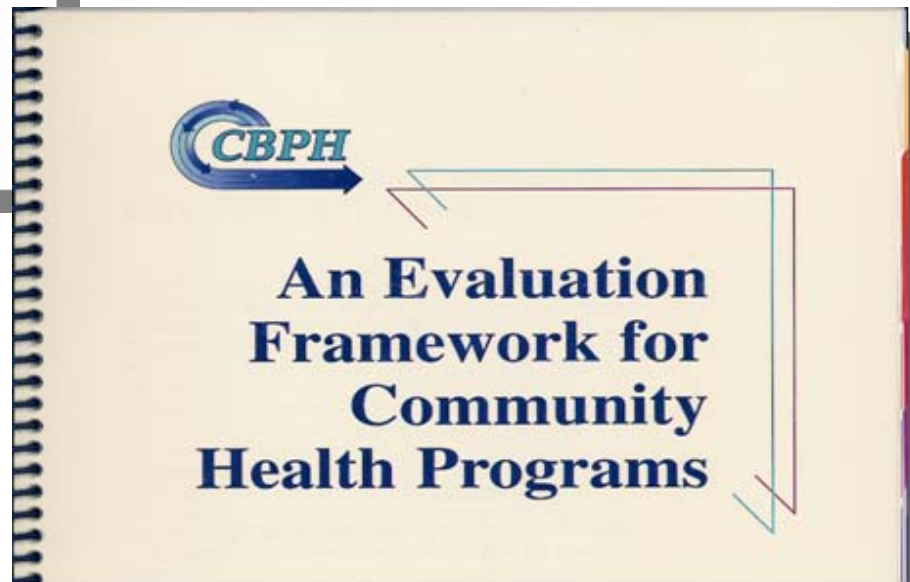
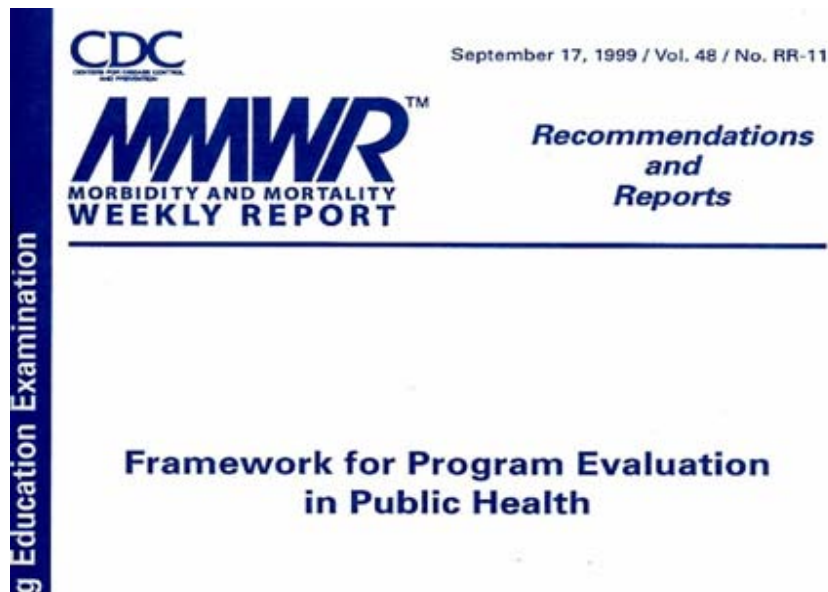
...Everything I needed
to know about life (or at
least my program)...I
learned from my logic
model!!!



Integrating Program Planning and Evaluation

Life Post-Session

Helpful Publications @ www.cdc.gov/eval



Helpful Resources

- NEW! Intro to Program Evaluation for PH Programs—A Self-Study Guide:

<http://www.cdc.gov/eval/whatsnew.htm>

- Logic Model Sites

- ☐ Innovation Network:

- ☐ <http://www.innonet.org/>

- ☐ W.K. Kellogg Foundation Evaluation Resources:

- <http://www.wkkf.org/programming/overview.aspx?CID=281>

- ☐ University of Wisconsin-Extension:

- <http://www.uwex.edu/ces/lmcourse/>

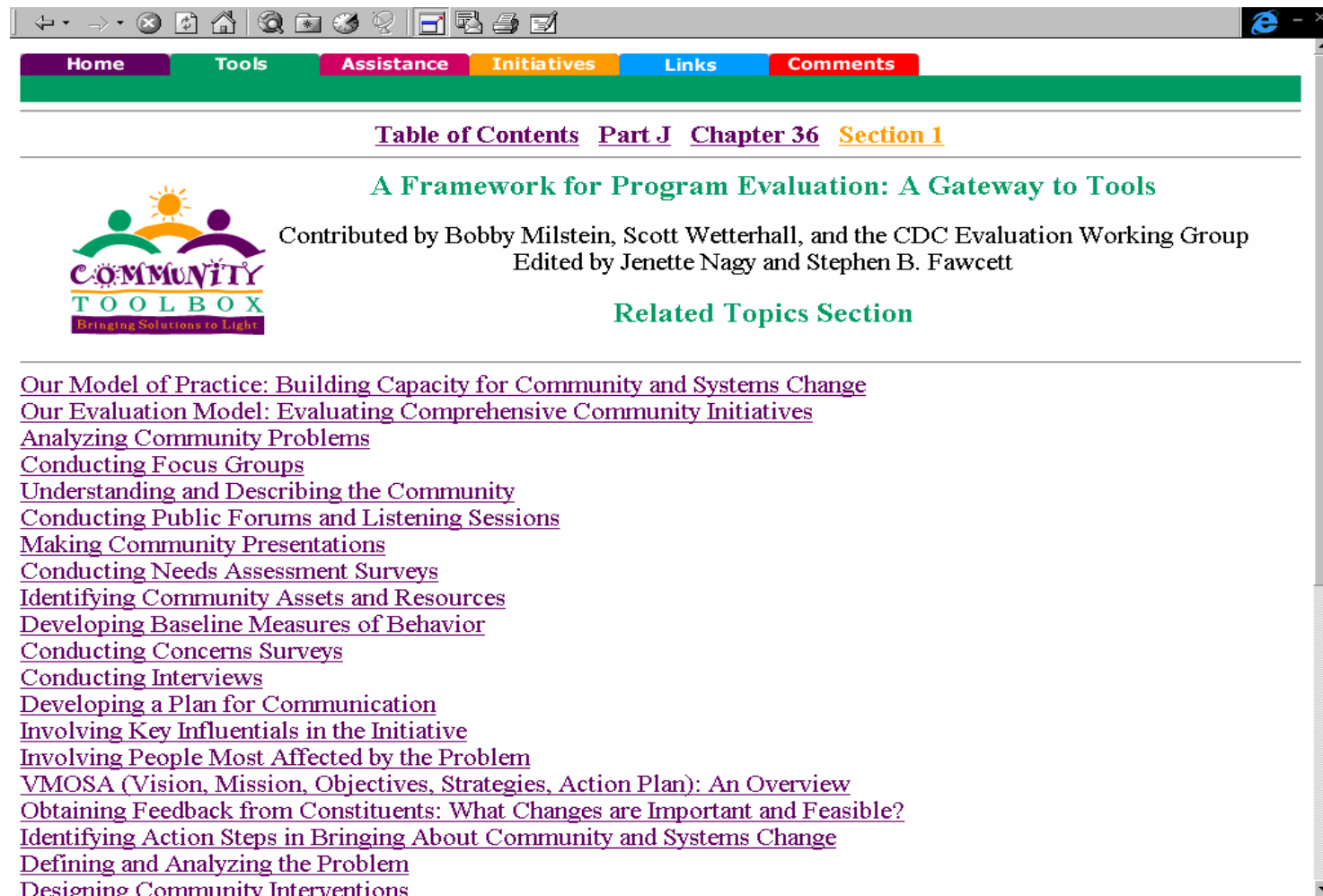
- Texts

- ☐ Rogers et al. Program Theory in Evaluation. New Directions Series: Jossey-Bass, Fall 2000

- ☐ Chen, H. Theory-Driven Evaluations. Sage. 1990

Community Tool Box

<http://ctb.ku.edu>



The screenshot shows a web browser window displaying the Community Tool Box website. The browser's address bar shows the URL <http://ctb.ku.edu>. The website has a green header with navigation tabs: Home, Tools, Assistance, Initiatives, Links, and Comments. Below the header, there is a breadcrumb trail: [Table of Contents](#) [Part J](#) [Chapter 36](#) [Section 1](#). The main content area features the title **A Framework for Program Evaluation: A Gateway to Tools** in green text. To the left of the title is the Community Tool Box logo, which consists of three stylized figures in green, orange, and purple holding hands under a sun, with the text "COMMUNITY TOOL BOX" and the tagline "Bringing Solutions to Light" below it. To the right of the logo, the text reads: "Contributed by Bobby Milstein, Scott Wetterhall, and the CDC Evaluation Working Group" and "Edited by Jenette Nagy and Stephen B. Fawcett". Below this, there is a section titled **Related Topics Section** in green text. This section contains a list of links to various topics, all underlined in purple: [Our Model of Practice: Building Capacity for Community and Systems Change](#), [Our Evaluation Model: Evaluating Comprehensive Community Initiatives](#), [Analyzing Community Problems](#), [Conducting Focus Groups](#), [Understanding and Describing the Community](#), [Conducting Public Forums and Listening Sessions](#), [Making Community Presentations](#), [Conducting Needs Assessment Surveys](#), [Identifying Community Assets and Resources](#), [Developing Baseline Measures of Behavior](#), [Conducting Concerns Surveys](#), [Conducting Interviews](#), [Developing a Plan for Communication](#), [Involving Key Influentials in the Initiative](#), [Involving People Most Affected by the Problem](#), [VMOSA \(Vision, Mission, Objectives, Strategies, Action Plan\): An Overview](#), [Obtaining Feedback from Constituents: What Changes are Important and Feasible?](#), [Identifying Action Steps in Bringing About Community and Systems Change](#), [Defining and Analyzing the Problem](#), and [Designing Community Interventions](#).

Helpful Resources: Web Based

- American Society for Quality (ASQ)
<http://www.asq.org/learn-about-quality/organization-approaches.html>
- Institute for Healthcare Improvement
<http://www.ihi.org/ihi>
- National Public Health Performance Standards Program
<http://www.cdc.gov/od/ocphp/nphpsp/>
- Public Health Foundation; Turning Point Performance Management Collaborative
<http://phf.org/performance.htm#TurningPoint>
- PuMP Performance Measurement Process
<http://www.staceybarr.com/>